California Regional Water Quality Control Board
North Coast Region

MONITORING AND REPORTING PROGRAM
ORDER NO. R1-2006-0028
(REVISED OCTOBER 13, 2006)

For

HUMBOLDT WASTE MANAGEMENT AUTHORITY
CUMMINGS ROAD SOLID WASTE DISPOSAL SITE
CLASS III WASTE MANAGEMENT UNIT
WDID NO. 1B79133OHUM

Humboldt County

MONITORING

Cummings Road Solid Waste Disposal Site (Site) is a Class III municipal landfill. On June 16, 2000, Humboldt Waste Management Authority (HWMA) (hereinafter Discharger) became the owner and operator of the landfill. The facility is an intermediate cover closed municipal solid waste disposal site that drains into Ryan Creek and an unnamed creek that flows into Freshwater Creek. Cleanup and Abatement Order (CAO) No. R1-2006-0028 was ordered because of releases of sediment and leachate to storm water and surface water.

Compliance with this Monitoring and Reporting Program (MRP), and with the companion Standard Provisions and Reporting Requirements, is ordered by CAO No. R1-2006-0028, pursuant to Water Code section 13267(b). Failure to comply with this MRP, or with the General Monitoring and Reporting Requirements, can result in the imposition of civil monetary liability under California Water Code sections 13350 and 13268.

Any person affected by this action of the Regional Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with Water Code section 13320 and title 23, California Code of Regulations, section 2050. The petition must be received by the State Water Board within 30 days of the date of this Order. Copies of the law and regulations applicable to filing petitions will be provided upon request. In addition to filing a petition with the State Board, any person affected by this Order may request the Regional Water Board to reconsider this Order. To be timely, any such request must be made within 30 days of the date of this Order. Note that even if reconsideration by the Regional Water Board is sought, filing a petition with the State Water Board within the 30-day period is necessary to preserve the petitioner's legal rights. If you choose to request reconsideration of this Order or file a petition with the State Water Board, be advised that you must comply with the Order while your request for reconsideration and/or petition is being considered.

SAMPLING AND LABORATORY ANALYSIS

1. Surface water and storm water monitoring points shall be sampled and analyzed in accordance with the following table:

Sampling Point (1)	**Sampling Frequency**	**VOCs (3)**	**General Laboratory Parameters (4)**	**Field Parameters (5)**	**Daily Rainfall**
S-1	As Determined by Turbidity Values **(2)**			X	
S-1A	As Determined by Turbidity Values **(2)**			X	
S-1A	Monthly**(6)**	X	X	X	
S-7	Every other Month**(7)**		X	X	
S-8 or S-8A	As Determined by Turbidity Values **(2)**			X	
S-8A	Monthly**(6)**		X	X	
S-9	As Determined by Turbidity Values **(2)**			X	
S-9	Monthly**(6)**		X	X	
Pipe P-1 **(8)**	Monthly**(6)**	X**(9)**		X	
Springs/Seeps (At Each Location)	Initial Sample	X**(9)**	X	X	
Springs/Seeps (At Each Location)	After Storm Events Greater Than or Equal to 1.0 inches	X**(9)**		X	
At Landfill**(10)**	Daily				X
Nearby Official Weather Station**(10)**	Daily				X

(1) S-1 is downgradient of the toe berm and all sediment gabions, near the property boundary; S-1A is at the discharge of the third (as counted from upgradient to downgradient) toe berm sediment gabion which captures the discharge from the lower sediment pond and the side slope french drains placed in Summer 2005; S-7 is downgradient of the interception trench discharge pipes; S-8 is the outlet of the upper sediment pond discharge pipe; S-8A is the upper sediment pond near the inlet pipe; and S-9 is an established sampling point on a subtributary of Ryan Creek, upgradient of landfill activities, which the Discharger established during Winter 2005-06. The seeps/springs are locations identified by field personnel as defined by seep/spring inspection requirements listed below. All sample locations and identifications shall be clearly marked on the site map.

(2) Compliance with turbidity requirements shall be determined by comparing the turbidity at S-1 and S-8 to the turbidity value of S-9. An exceedance is any instance where the turbidity value at either S-1 or S-8 is more than 20 percent higher than that at S-9. Note, if sampling at S-8 is not possible, then sampling at S-8A maybe substituted. Sampling at S-8 is not required if there is not any discharge, but the discharge condition shall be noted in the report in place of the field parameter values. An exceedance at either discharge point will trigger the higher sampling frequency described below at all four locations (S-1, S-1A, S-8, and S-9). Sampling shall occur when there is discharge from the lowest toe berm sediment gabion and/or from the upper sediment pond.

At the start of the rainy season, sampling shall be conducted daily when discharge occurs until there have been 10-inches of cumulative rainfall (as measured at Eureka NWS) and four consecutive discharge days have passed in which no turbidity exceedances have been measured. A discharge day is defined as a day when water is discharging either from the lowest toe berm sediment gabion or from the upper sediment pond (or both). After the initial rainfall conditions have been met and four consecutive discharge days with no measured turbidity exceedances, sampling frequency may be reduced to only those days when rainfall equals or exceeds 0.50-inches in 24 hours. If there are no turbidity exceedances from four consecutive 0.50-inch sampling events, then sampling frequency may again be decreased to those events where rainfall equals or exceeds 1.0-inch in 24 hours. Following the initial rainfall requirements and four consecutive discharge days without a turbidity exceedance, sampling frequency will return to daily any time that a turbidity exceedance is confirmed. Daily sampling shall occur until two consecutive discharge days have passed without a measured turbidity exceedance, at which point sampling frequency may again be reduced as described above, first to those days with 0.50-inch rain events, and subsequently to days in which 1.0-inch rainfall events occur.

(3) Volatile Organic Compounds (VOC) shall be analyzed using a full scan EPA Method 8260 (low level). Laboratory turnaround times shall allow all results

for the month to be evaluated and presented in the monthly report by the 15th of the following month.

(4) General laboratory parameters for the purposes of this Monitoring and Reporting Program include total suspended solids, total dissolved solids, chloride, ammonia, and potassium. Laboratory turnaround times shall allow all results for the month to be evaluated and presented in the monthly report by the 15th of the following month.

(5) Field parameters are turbidity, pH, specific conductance, dissolved oxygen, and temperature, estimated flow (gallons per minute).

(6) Sampling personnel shall select the day of the monthly sampling for a time of significant precipitation or immediately following a storm event. Whenever possible, sampling shall be conducted during or after a rain event that is approximately 0.50-inches in 24 hours or greater.

(7) Sampling at S-7 shall be scheduled for a time of significant precipitation or immediately following a storm event. Sampling shall occur in October, December, February, and April.

(8) Sampling location P-1 is a drainage pipe in the toe berm area that is not collected by the leachate system. The location of the P-1 pipe outlet shall be shown on the sample location map.

(9) VOC sampling is only required when the specific conductivity result at a given location equals or exceeds 400 umhos/cm.

(10) Monthly monitoring reports shall indicate the locations of rain measuring stations.

2. All testing, other than field parameters, shall be performed at a laboratory certified by the California Department of Health Services.

3. Instruments used for field parameters shall be kept in good condition and calibrated according to manufacturer's requirements.

4. The Discharger shall conduct an initial site inspection prior to October 20, 2006 to identify any current seeps or springs on any of the landfill faces, the toe berm, or within 10 horizontal feet of the landfill front face or toe berm (transitional area). After the initial seep/spring inspection, the Discharger shall inspect the site after the first 10-inches of cumulative rainfall and every 5-inches of cumulative rainfall thereafter, and during or immediately following rainfall events which exceed 1.0-inch of precipitation in a 24-hour period as rainfall is measured at the Eureka NWS to determine if there are any additional seep/spring locations that have not previously been identified. Locations identified during inspections shall be surveyed using GPS or traditional surveying methods, plotted on a site topographic map, and given discrete identifiers to use in reference to any sampling or observations, and sampled per requirements in Item No. 1 to determine if they are leachate (regardless of whether they are currently discharging). If leachate seepage (other than seeps collected and transported to storage facilities) is occurring, the Discharger shall mark the location of the occurrence, take immediate

steps to prevent leachate from discharging to surface waters, and report the occurrence to the Regional Water Board by telephone within 24 hours. A field log of seep/spring inspections shall be compiled and submitted to the Regional Water Board with the sample results, and shall be included in the monthly monitoring report.

REPORTING

5. Discharger shall submit a monthly report by the 15th day of the month, beginning on November 15, 2006, which shall include all sampling results from the previous month.

6. Each report shall contain a map showing the monitoring locations, topographic contours, and major site features. A second map showing the current landfill topographic contours and the major site features shall be presented with the locations of the seeps detected during the month. This map shall be of a large enough scale that the locations are accurately shown. The report shall include a narrative discussion of water quality sampling and seep detection and response, including notations of any water quality violations, tabular summaries of the water quality data for the sampling locations specified in Item No.1, and tabular summaries for any seeps detected during the month. Tabular summaries shall include notations to clearly identify specific analytical results that indicate an exceedance of water quality standards for naturally occurring compounds; an exceedance of detection limits for all man-made compounds; or any other violation of the Site's WDR prohibition to discharge to surface water, surface water drainage systems, or groundwater; or both. Any of these conditions is a violation of the CAO.

   Any detection of a man-made compound in the landfill drainage or surface water is a discharge violation. To determine if the landfill has contributed to the discharge for naturally occurring compounds, data shall be compared to results from the background sampling location S-9. Any discharge of a naturally occurring compound at a level statistically greater than background is a violation. The calculation of background shall include consideration of variations that occur due to rainfall.

   Records from daily rainfall measurements shall be included in the reports. Daily rainfall and estimated flow data shall be tabulated. In reporting the monitoring data required by this program, the Discharger shall arrange the data in tabular form so that the date, the constituents, the concentrations, and the units are readily discernible. The data shall be summarized in such a manner as to clearly illustrate compliance, or lack thereof, with the CAO. These reports shall be prepared by, or under the direction of, a professional civil engineer, or registered geologist, and shall be signed and stamped by this professional.

7. Each report shall contain copies of the field sampling log, chain of custody, including the date and time of sample collection, the name of the person collecting the samples, the signed lab sheets including QA/QC, daily field logs, and leachate seep inspection logs.

8. The results of any monitoring conducted more frequently than required or at additional locations shall be reported to the Regional Water Board.

9. Results of the sampling field parameters and field logs from leachate seep detection inspections shall be submitted via facsimile, prior to 5:00 p.m. each business day on the day of sample collection or inspection, to 707-523-0135, attention Gina Morrison. Data may be alternatively delivered via email to gmorrison@waterboards.ca.gov. If there are problems with transmittal contact Gina Morrison at 707-576-2501.

10. Analytical results for the general laboratory field parameters and VOCs shall be sent directly from the laboratory to our office via facsimile to (707) 523-0135, attention Gina Morrison, the same day they are submitted to the Discharger. Data may be alternatively delivered via email to gmorrison@waterboards.ca.gov. If there are problems with transmittal contact Gina Morrison at 707-576-2501.

Ordered by _____
Catherine E. Kuhlman
Executive Officer

October 13, 2006